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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,619	08/27/2001	Tetsuya Aoyama	500.40571X00	2353

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EXAMINER

CHOW, DOON Y

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,619

Applicant(s)

AOYAMA ET AL.

Examiner

Dennis-Doon Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 6-14, 19-21 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15-17, 23, 24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 18 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of Species 14 – Embodiment 14 with claims 1-5, 15-18, 22-24, 26 and 27 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that at least claim 1 is a generic claim and such claim has not been rejected. This is not found persuasive because not all of the dependent claims belong to the same species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 15-17, 23 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (5870075)

Regarding to claims 1-3, 15-16 and 26-27, Yamazaki discloses a liquid crystal display apparatus: comprising a first substrate; a second substrate; a plurality of pixels which are sandwiched between the first substrate and the second substrate and form a display section; wherein each of the pixels (Fig. 1) is provided with a first pixel electrode (101, Fig. 1), a second pixel electrode (102, Fig. 1), and other pixel electrodes (112 and 113, Fig. 1); a first signal driver (402 Figs. 4A and 4B); a second signal driver (403 Figs.

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4A and 4B); a scan driver (404, 405, Figs. 4A and 4B); a signal control circuit (406, Figs. 4A and 4B); a plurality of first and second scan lines (Figs 1 and 8); a plurality of first and second signal lines (Figs. 1 and); and a plurality of first and second switch elements (Figs. 1 and 8). Yamazaki further discloses the first and second pixel electrode (101 and 102) are disposed on the first substrate (see Figs. 2A and 2B), and the other pixel electrodes (112 and 113) are disposed on the second substrate (see Figs. 2A and 2B).

Yamazaki does not call the other pixel electrodes (112 and 113) as common electrodes. However, in Fig. 10, Yamazaki discloses a pixel electrode of a pixel (1012) is connected to a switch (1007), and the other pixel electrode of the pixel (1012) is commonly connected to the ground, which is commonly known as a common electrode. Since the pixel electrodes (112 and 113) are equivalent to the other pixel electrode of the pixel (1012), it would have been obvious to one ordinary skill in the art that the pixel electrodes (112 and 113) are equivalent to a common electrode.

Regarding to claims 17 and 23, Yamazaki does not explicitly disclose displacing a dielectric layer on the common electrode. However, using a dielectric layer with a thickness of 1.5 μm or more on a common electrode in a liquid crystal display device is well known in the art. Therefore, it would have been obvious to one ordinary skill in the art use the known dielectric layer on the common electrode of the Yamazaki's display apparatus because the dielectric layer enhances the quality of the displayed image of the display apparatus.

4. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. as applied to claims 1-3, 15-17, 23 and 26-27 above, and further in view of Applicant's Admitted Prior Art (AAPA).

Yamazaki fails to disclose disposing the pixel electrodes and the common electrodes on the first substrate.

AAPA disclose, in the same display field, disposing pixel electrodes and common electrodes on a first substrate (1, Fig. 2).

In light of AAPA, it would have been obvious to one ordinary skill in the art to disposing Yamazaki's pixel electrodes and common electrodes on the first substrate because this arrangement provides a larger angle of visibility. This is taught by AAPA (see page 1, lines 22-24).

Allowable Subject Matter

5. Claims 18 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uno et al. and Watanabe et al. disclose a liquid crystal display device.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on 703-305-9720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Chow
February 20, 2004


DENNIS-DOON CHOW
PRIMARY EXAMINER